

Remarks

Applicants respectfully request that this Amendment After Final Action be admitted under 37 C.F.R. § 1.116.

Applicants submit that this Amendment presents claims in better form for consideration on appeal. Furthermore, applicants believe that consideration of this Amendment could lead to favorable action that would remove one or more issues for appeal.

No claims have been amended. No claims have been canceled. Therefore, claims 1-16 are now presented for examination.

Claims 1-7 and 10-11 stand rejected under 35 U.S.C. §102 (b) as being anticipated by Durham et al. (U.S. Patent No. 6,000,036). Applicants submit that the present claims are patentable over Durham.

Durham discloses a circuit for distributing an instruction to one of a plurality of functional circuits each positioned within different areas of an integrated circuit. The circuit includes a first functional circuit positioned within a first area of the integrated circuit and a second functional circuit positioned within a second area of the integrated circuit. The circuit also includes a first circuit for measuring or estimating power dissipation within the first area of the integrated circuit and generating a first signal relating to the measured or estimated power dissipation within the first area. A second circuit is provided for measuring or estimating power dissipation within the second area of the integrated circuit and generating a second signal relating to the measured or estimated power dissipation within the second area. The first signal and the second signal are processed and the instruction is routed to the first functional circuit for performance of an operation when the power dissipation in the second area exceeds a predetermined amount or to the second functional circuit when the power dissipation in the first area exceeds a predetermined amount. See Durham at co. 2, ll. 14-31.

Claim 1 of the present application recites:

A method of managing power generated within a computer system, the method comprising:
operating the computer system at a first central processing unit (CPU);
receiving a first signal generated by a thermal sensor within the first CPU; and
resuming operation of the computer system at a second CPU.

Applicants submit that there is no disclosure or suggestion in Durham of a first central processing unit (CPU) receiving a first signal generated by a thermal sensor within the first CPU, and resuming operation of the computer system at a second CPU.

The Examiner asserts:

... Durham teaches a processing circuit with two distinct neighborhoods or areas of functional units which are typically found in typical microprocessors. These two neighborhoods perform substantially the same function [**column 3, lines 20-55**]. Since each neighborhood individually is able to perform the functions of a microprocessor or CPU, each neighborhood can be interpreted to be a microprocessor or CPU.

See Final Office Action at page 4, paragraph 2.

Applicants respectfully disagree with the Examiner's characterization of Durham. Referring to the sections relied on by the Examiner, Durham discloses that the functional units or circuits are of the type(s) typically found in a microprocessor (within the integrated circuit) and perform certain functions (i.e., units such as a floating and/or fixed point arithmetic logic unit (ALU), registers, bus interface, cache memory, a second smaller processor, and the like). Durham further discloses that if the first functional unit is an ALU, then the second functional unit would also be an ALU, if the first functional unit is an on-chip cache memory, then the second functional unit would be an on-chip cache memory, and so on. Durham at col. 3, ll. 24-30 and 49-54.

Durham explicitly teaches that the functional units are those parts typically found in a CPU, and not a complete CPU individually able to perform the functions of a CPU. Moreover, Durham in essence describes a CPU with processing transferred between functional units within the same CPU. Transferring operations between functional units is not equivalent to transferring operations between CPUs. Thus, there is no second CPU in Durham that operates when a first CPU reaches a predetermined threshold.

Claims 2-4 and 10-11 depend from claim 1 and include additional limitations. Therefore, claims 2-4 and 10-11 are also patentable over Durham.

Claim 5 recites:

A computer system comprising:
a first central processing unit (CPU); and
a second CPU, wherein the operation of the
computer system is transferred from the first
CPU to the second CPU upon the first CPU
reaching a predetermined power threshold.

Thus, for the reasons described above with reference to claim 1, claim 5 is also patentable over Durham. Since claims 6-9 depend from claim 5 and include additional limitations, claims 6-9 are also patentable over Durham.

Claim 12 recites:

A cooling system comprising:
a heat pipe; and
a first central processing unit (CPU) coupled to the
heat pipe; and
a second CPU coupled to the heat pipe, wherein the
first CPU is active until reaching a
predetermined power threshold and the second
CPU becomes active upon the first CPU
reaching the predetermined power threshold.

Accordingly, for the reasons described above with reference to claim 1, claim 12 is also patentable over Durham. Since claims 13-16 depend from claim 12 and include additional limitations, claims 13-16 are also patentable over Durham.

Claims 8, 9 and 12-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Durham et al. (U.S. Patent No. 6,000,036) in view of Applicants' Admitted Prior Art (AAPA).

Applicants' Specification discloses a cooling system having two or more CPUs mounted on a heat pipe. Nevertheless, the Specification does not disclose or suggest a first CPU being active until reaching a predetermined power threshold and a second CPU becoming active upon the first CPU reaching the predetermined power threshold.

As discussed above, Durham does not disclose or suggest a first CPU being active until reaching a predetermined power threshold and a second CPU becoming active upon the first CPU reaching the predetermined power threshold. Since neither Durham nor Applicants' Specification disclose or suggest a first CPU being active until reaching a predetermined power threshold and a second CPU becoming active upon the first CPU reaching the predetermined power threshold, any combination of Durham and the Specification would also not disclose or suggest such a limitation. Accordingly, the present claims are patentable over Durham in view of the Specification.

Applicants respectfully submit that the rejections have been overcome, and that the claims are in condition for allowance. Accordingly, applicants respectfully request the rejections be withdrawn and the claims be allowed.

The Examiner is requested to call the undersigned at (303) 740-1980 if there remains any issue with allowance of the case.

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,
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